

Work Order ID 159844

Wednesday, April 19, 2017 12:22:06 PM

Page 1

647.0112
B159844
REV. A

159844

Item ID: 647.0112

Revision ID:

Item Name: Strut Bracket

Start Date: 4/21/2017 Start Qty: 60.00

Required Date: 5/12/2017 Req'd Qty: 60.00

Reference: SCHEDULED/S

Accept

N900040100

Setup

Start

NS1

Stop

NS2

Cust Item ID:

Customer:

Approvals:

Process Plan:

DAS
21
9-89

Date:

APR 20 2017

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run

Start

NR1

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

647.0100

A

100

0.02

100

Waterjet

FLOW CNC Waterjet

FLOW WATER JET

Memo

1-Cut as per Dwg

Dwg Rev: A

Prog Rev: A

2-Deburr if necessary

1.73

(60)

02/17/04/22

110

0.00

110

QC

Quality Control

QC2- Inspect parts off machine FAI/FAIB

Memo

0.60

(60)

02/17/04/22

Work Order ID 159844

Wednesday, April 19, 2017 12:22:06 PM

159844

Page 3

Item ID: 647.0112 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Strut Bracket
Start Date: 4/21/2017 Start Qty: 60.00 ***60*** Cust Item ID:
Required Date: 5/12/2017 Req'd Qty: 60.00 ***60*** Customer:
Reference: SCHEDULED/S

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150		0.00							DAS 41 9-89
150						60			
SprayPaint	Memo	0.60							
Spray Painting	PRIME AS PER DWG NOTE 6								APR 27 2017
	BATCH: 137287								
160	QC14- Inspect Spray Paint	0.00							DAS 38 9-89
160						60			
QC	Memo	0.60							
Quality Control									APR 28 2017
170	Identify as per dwg & Stock Location: <u>55k106</u>	0.00							
170						60			
Packaging	Memo	0.60							
Packaging	***IDENTIFY AS PER APICAL MPP-120 BY STAMPING P# AND REV***								APR 28 2017 DAS 6 9-89

Work Order ID 159844

Wednesday, April 19, 2017 12:22:06 PM

159844

Page 4

Item ID: 647.0112 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Strut Bracket
Start Date: 4/21/2017 Start Qty: 60.00 ***60*** Cust Item ID:
Required Date: 5/12/2017 Req'd Qty: 60.00 ***60*** Customer:
Reference: SCHEDULED/S

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
180	QC21 - Final Inspection - Work Order Release	0.00							
180									
QC	Memo	6.00							
Quality Control									

17/5/1 28

APR 28 2017

Picklist Print

Wednesday, April 19, 2017 12:22:06 PM

Page 1

Work Order ID: 159844

159844

Parent Item: 647.0112

647 0112

Parent Item Name: Strut Bracket

Start Date: 4/21/2017

Required Date: 5/12/2017

Start Qty: 60.00

Required Qty: 60.00

Comments: IPP REV:A 12.08.14 NEW ISSUE DD VERF:JFS

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304S14GA		Purchased			No	100	sf	62.2950	0.0325	2.05263			

M304S14GA

304SS sheet .080

04/17/04/23

Location

Loc Qty

Loc Code

MAT019

62.295

M136463

1.095

M136896

32

M137263

29.2

2.1

APICAL INDUSTRIES, INC.	ENGINEERING CHANGE NOTICE NO. 03985			SHEET 1 OF 2	
	DWG NO. 647.0100	REV: A	PREPARED BY J. BECKER	DATE: 7/15/13	EFFECT ON DWG ☐ INC. ☒ UNINC.
	DWG TITLE: SHEET METAL				
	APPROVED BY: ENGR	MFG	QC	EFF. NEXT ORDER	
TRANSACTION CODES (TC): A-ADD C-CREATE R-REVISE D-DELETE	REASON: REVISED NOTE 2. ADDED 647.0117				

- IS

NOTES:

2

1 MATERIAL: ALUMINUM 2024-T3 PER AMS-QQ-A-250/4.

2 FINISH: IAW MPP-172 ANODIZE IAW SECTION 2.1,
PRETREATMENT IAW SECTION 3.1
AND PRIMER IAW SECTION 4.1.

3. DEBURR AND BREAK ALL SHARP EDGES.

4. IDENTIFY IAW MPP-120.

5 MATERIAL: 304 SS IAW AMS 5643.

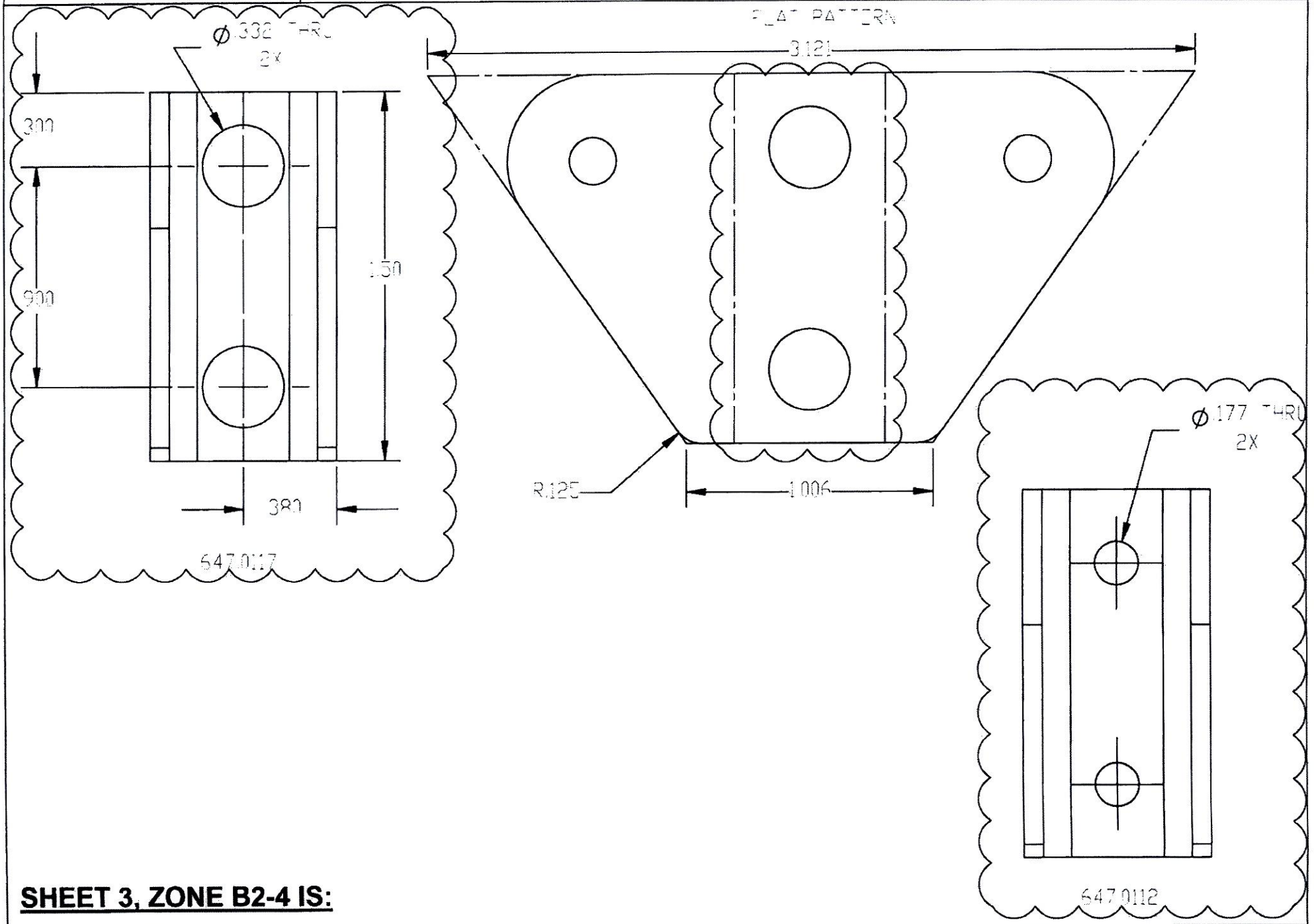
6 FINISH: PRIME IAW MIL-P-23377J TYPE I CLASS N.

7 OTHER DIMENSIONS SAME AS 647.0112.

SHOP COPY
 RETURN TO
 ENGINEERING
 UNCONTROLLED COPY
 SUBJECT TO AMENDMENT
 WITHOUT NOTICE
 WORK ORDER
 NO. 159894 *MJS*
1704-20

SHEET 1, ZONE D1 IS:

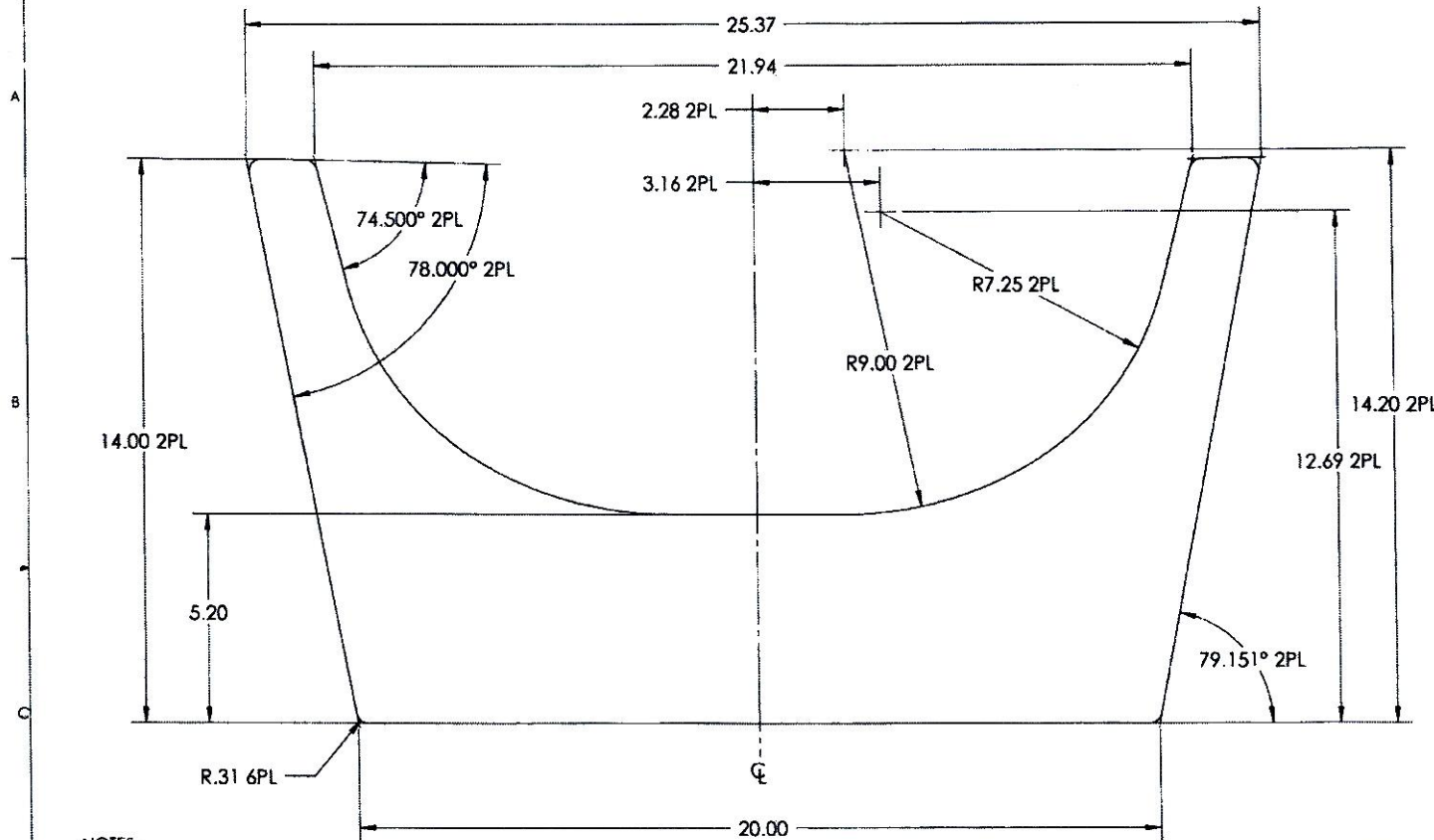
	C	647.0117			STRUT BRACKET	△	△
F/N	TC	PART NUMBER			DESCRIPTION	MATERIAL	SPECIFICATION
DOCUMENTS EFFECTED: ☐ MDL ☐ INSTALL INSTRUCTIONS ☐ ICA ☐ FMS ☐ BOM						CHANGE CATEGORY ☐ MAJOR ☒ MINOR	DER REVIEW REQUIRED ☐ YES ☒ NO



SHEET 3, ZONE B2-4 IS:

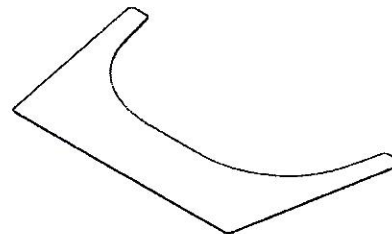
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
1	LAST PROTOTYPE REVISION PER		N/C
N/C	INITIAL RELEASE	03/28/09	P BRAVO
A	INCORPORATED ECH 0277 02964 030P	04/06/11	P BRAVO



NOTES:

- 1 MATERIAL: ALUMINUM 2024-T3 PER AMS-QQ-A-250/4.
- 2 FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE III, CLASS 2, COLOR BLACK; PRETREAT PR-148 ADHESION PROMOTER; PRIME IAW MIL-P-23377J TYPE I CLASS N.
3. DEBURR AND BREAK ALL SHARP EDGES.
4. IDENTIFY IAW MPP-120.
- 5 MATERIAL: 304 SS IAW AMS 5643.
- 6 FINISH: PRIME IAW MIL-P-23377J TYPE I CLASS N.



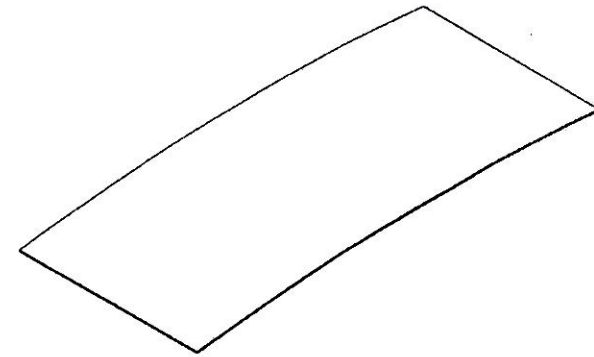
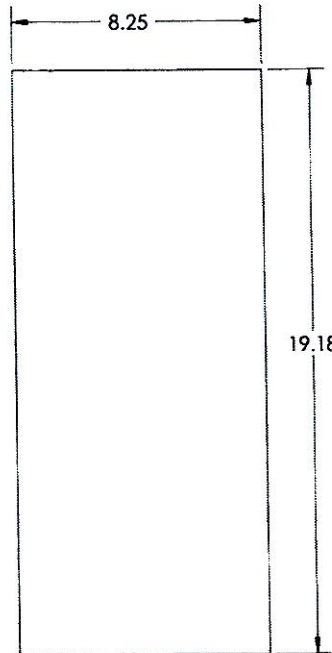
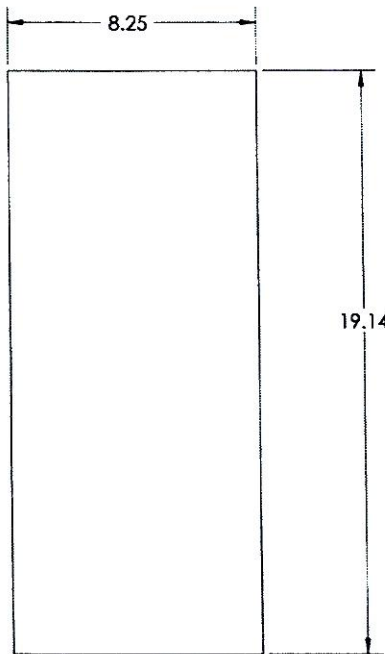
647.0110

UNINCORPORATED ECN(S)

03985

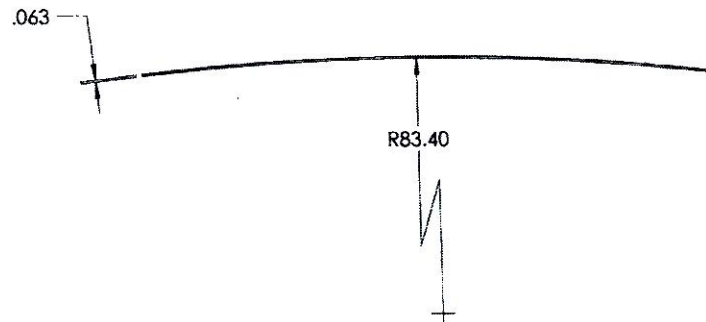
QTY	FIND #	PART #	DESCRIPTION	MATL	SPEC.
		647.0116	DOUBLER	△	△
		647.0115	CLIP	△	△
		647.0114	CLIP	△	△
		647.0113	STRUT DOUBLER	△	△
		647.0112	STRUT BRACKET	△	△
		647.0111	PANEL	△	△
		647.0110	ROOF DOUBLER	△	△
PARTS LIST					
NEXT ASSY (S)			APICAL INDUSTRIES		
646.9500			2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)/24-5300		
			SHEETMETAL		
			1001 CASE CODE	DWG NO.	REV
			B 07M26	647.0100	A
			SCALE: NONE	SHEET 1 OF 6	

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF
APICAL INDUSTRIES ANY REPRODUCTION IN PART OR WHOLE WITHOUT
THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED



647.0111

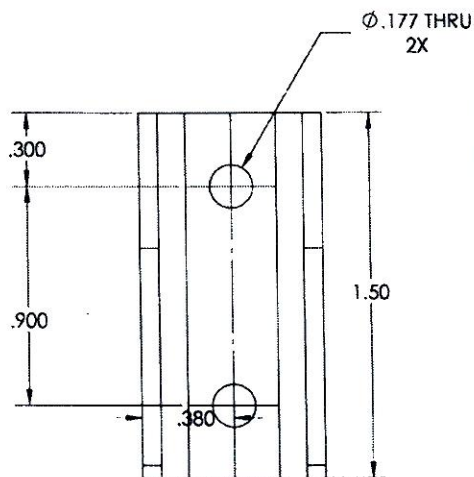
FLAT PATTERN



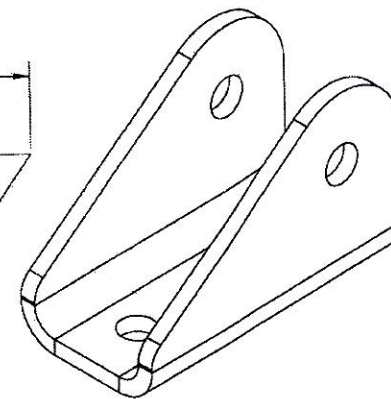
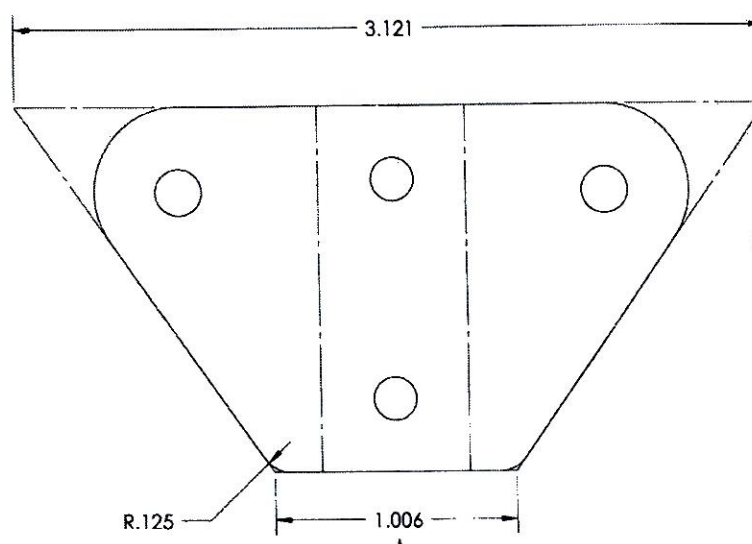
ORIGINAL DATE JANUARY 1981 05-28-89		APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
DRAWN BY A. ROMANO	CHECKED P. BRAYO		
DRAWING APPROVAL P. BRAYO		SHEETMETAL	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 3 PLACE DECIMALS ± .01 2 PLACE DECIMALS ± .005 ANGLES ± .5°		REV B	REV A
SCALE: NONE		SHEET 2 OF 6	

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES AND REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.

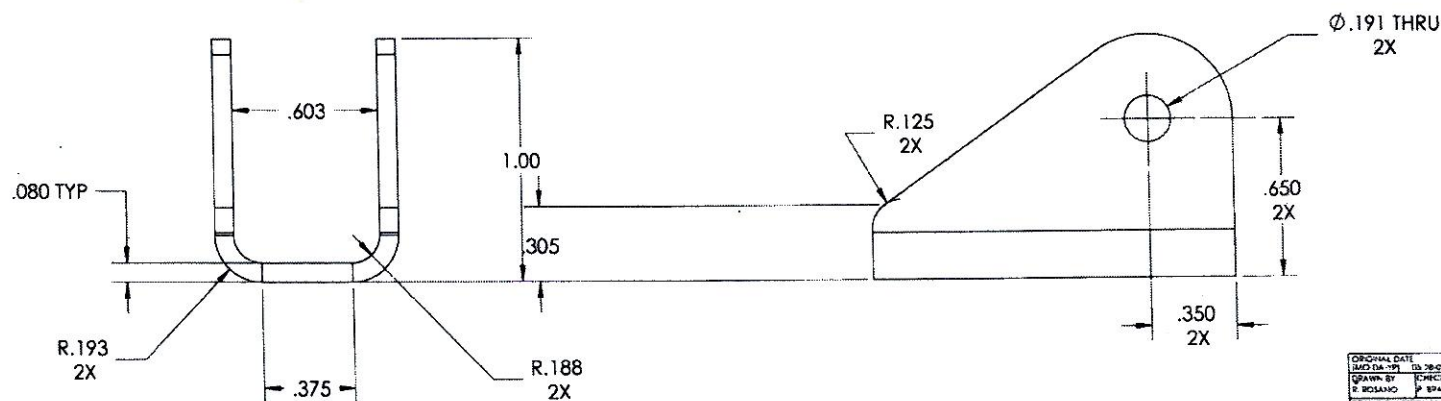
REV.		DESCRIPTION	DATE	APPROVED



FLAT PATTERN



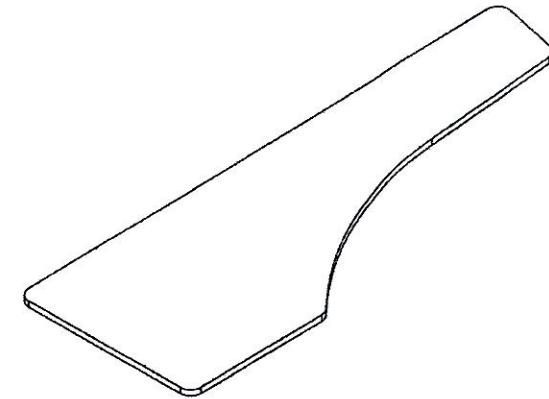
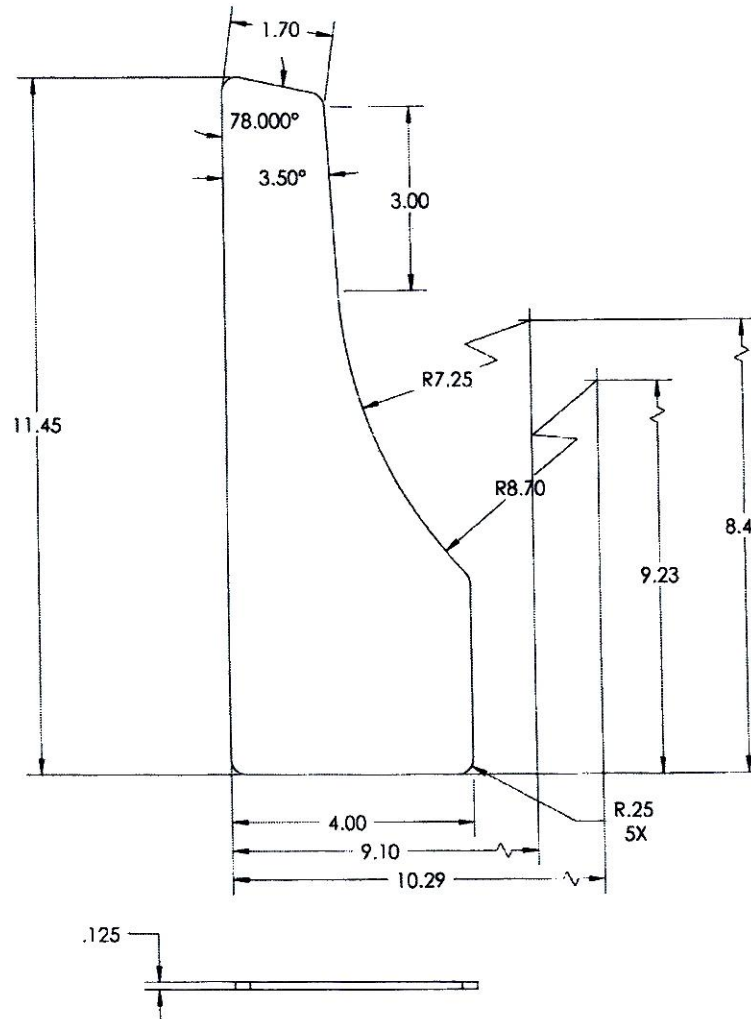
647.0112



ORIGINAL DATE: 03-28-09		APICAL INDUSTRIES	
DRAWN BY: J. HOSANO		2608 TEMPLE HEIGHTS DR.	
CHECKED BY: J. BRAVO		OCEANSIDE, CA. 92056-3512 (760)724-5300	
DRAWING APPROVAL: J. BRAVO		SHEETMETAL	
CONTRACT NO.			
UNLESS OTHERWISE SPECIFIED		SHEET 3 OF 6	
DIMENSIONS ARE IN INCHES			
TOLERANCES ARE:			
2 PLACE DECIMALS ±.01			
3 PLACE DECIMALS ±.005			
ANGLES ±.5°			

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.

REV		DESCRIPTION	DATE	APPROVED

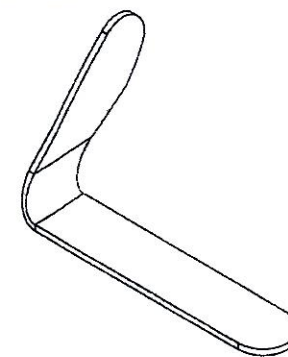
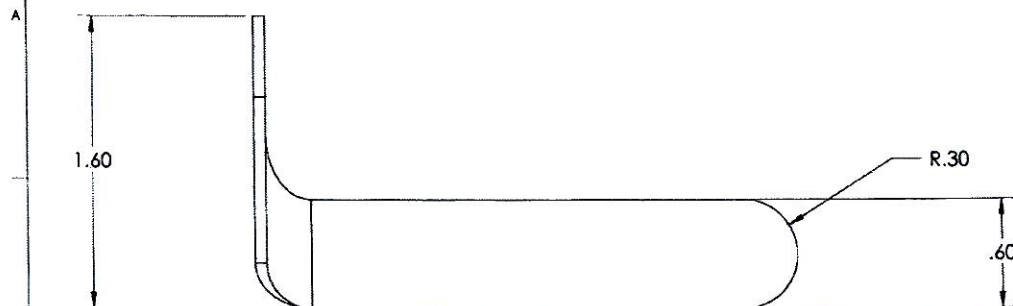


647.0113

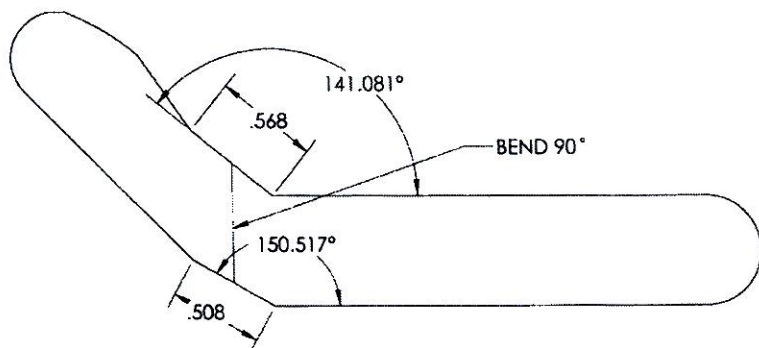
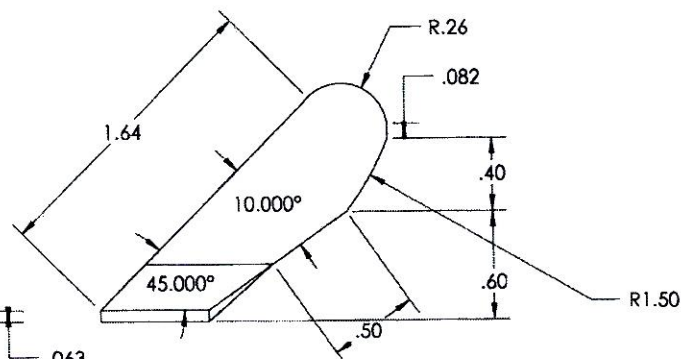
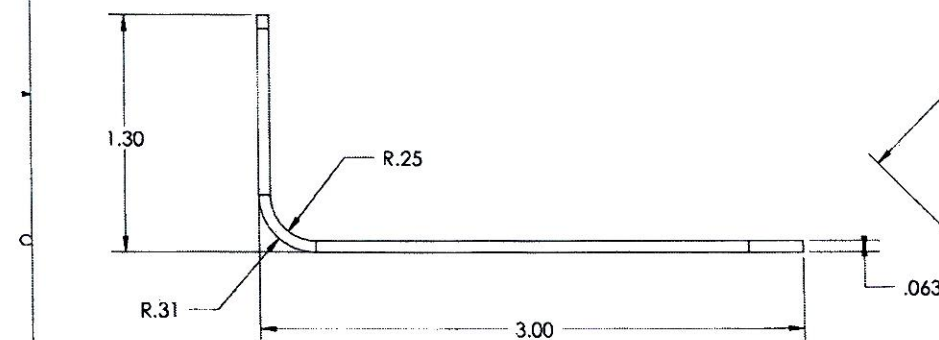
ORIGINAL DATE: 05-28-09		APICAL INDUSTRIES	
DRAWN BY: J. ROIANO		2608 TEMPLE HEIGHTS DR.	
CHECKED BY: J. BRAVO		OCEANSIDE, CA. 92056-3512 (760)724-5300	
DRAWING APPROVAL: J. BRAVO		SHEETMETAL	
CONTRACT NO.			
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES		REV	
TOLERANCES ARE:		A	
3 PLACE DECIMALS ± .01		647.010J	
2 PLACE DECIMALS ± .005		SCALE: NONE	
ANGLES ± 1°		SHEET 4 OF 6	

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF
APICAL INDUSTRIES. ANY REPRODUCTION IN PART OR WHOLE WITHOUT
THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED



647.0114 SHOWN
647.0115 OPPOSITE



FLAT PATTERN

ORIGINAL DATE 8/20/09		APICAL INDUSTRIES	
DRAWN BY P. ROJANO		2608 TEMPLE HEIGHTS DR.	
CHECKED BY P. BRAND		OCEANSIDE, CA. 92056-3512 (760)724-5300	
DRAWING APPROVAL P. BRAND		SHEETMETAL	
SHEETMETAL		SCALE NONE	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE 3 PLACE DECIMALS ± .01 ANGLES ± 1°		SIZE B	QTY A
CAGE CODE 07M16		DWG NO 647.0100	SHEET 5 OF 6

